Claims

1. A device for continuously producing emulsions or dispersions while excluding air, comprising a mixing vessel, which is closed on all sides and which has supply tubes and discharge tubes for introducing and discharging fluid substances or compositions, and also an impeller, which permits an agitating input into the emulsion or dispersion without generating cavitation forces and without high-pressure homogenization.

2. The device of claim 1, characterized in that the mixing vessel has a substantially cylindrical form, the axis of the impeller lies in the cylinder axis, and the supply tubes and discharge tubes are disposed substantially perpendicular to the cylinder axis in the top and bottom peripheral region of the cylinder, at a distance from one another.

3. The device of claims 1 or 2, characterized in that at least one sensor is disposed in the discharge tube for continuously measuring the temperature, conductivity and/or optical properties of the emulsion or dispersion.

4. The device of any one of claims 1 to 3, characterized in that it has at least two mixing vessels arranged in series with one another, the discharge from the first mixing vessel being introduced into the second mixing vessel, and a further supply tube into the second mixing vessel being provided.

5. The device of any one of claims 1 to 4, characterized in that the mixing vessels can be thermally conditioned independently of one another.

6. The device of any one of claims 1 to 5, characterized in that the supply of the fluid substances and the agitated input and, if desired, the thermal conditioning of the mixing vessels are under computer control.

7. A method for continuously producing emulsions and dispersions while excluding air, in which at least two fluid streams of at least two phases of the emulsions or dispersions are metered separately and continuously into a mixing vessel which is closed on all sides, and in which they are converted, with agitated input, into an emulsion or dispersion, and the emulsion/dispersion is discharged continuously from the mixing vessel, the

agitated input taking place without generating cavitation forces and without high-pressure homogenization.

8. The method of claim 7, characterized in that the proportion of the at least two fluid streams to one another is set such that in the mixing vessel a viscoelastic range of the mixture is set.

9. The method of claim 7 or 8, characterized in that the emulsion or dispersion discharged from the first mixing vessel and a further fluid stream are metered into a second mixing vessel, which is closed on all sides and from which the desired emulsion or dispersion is discharged.

10. The method of any one of claims 7 to 9, characterized in that it is carried out in a device as claimed in any one of claims 1 to 6.

11. The method of any one of claims 7 to 10, characterized in that it is used for producing nanoemulsions, nanodispersions or SLN dispersions.